

**Amendments to the Claims:**

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

- Claim 1.       **[Currently Amended]** An aqueous gel medium for facilitating the electrophoretic separation of analytes present in a sample, said medium comprising:
- (A)   a non-crosslinked hydrophilic polymer;
  - (B)   tris(hydroxymethyl)aminomethane – borate buffer;
  - (C)   sodium dodecyl sulfate; and
  - (D)   an organic additive;
- wherein:
- said tris(hydroxymethyl)aminomethane – borate buffer has a pH above 8.0 and below 8.3[[,]]; **said gel medium additionally contains one or more reagent(s) that function to help keep protein analytes in a reduced form;** and ~~wherein~~ said aqueous gel medium facilitates the electrophoretic separation of said analytes by comprising a molecular sieve.
- Claim 2.       **[Canceled]**
- Claim 3.       **[Currently Amended]** The aqueous gel medium of ~~claim 2~~ **claim 1**, wherein said one or more reagent(s) include a reducing reagent.

- Claim 4.       **[Original]** The aqueous gel medium of claim, wherein said reducing reagent is selected from the group consisting of 2-mercaptoethanol, dithiothreitol (DTT), dithioerythreitol (DTE), and tris(2-carboxyethyl)phosphine.
- Claim 5       **[Original]** The aqueous gel medium of claim 4, wherein said reducing reagent is dithiothreitol (DTT).
- Claim 6.       **[Currently Amended]** The aqueous gel medium of ~~claim 2~~ claim 1, wherein said one or more reagent(s) include a metal ion chelator.
- Claim 7.       **[Original]** The aqueous gel medium of claim 6, wherein said reducing reagent is ethylenediaminetetraacetic acid (EDTA).
- Claim 8.       **[Original]** The aqueous gel medium of claim 1, wherein said non-crosslinked hydrophilic polymer is selected from the group consisting of: dextran, polyacrylamide, cellulose derivatives and polyethylene oxide.
- Claim 9.       **[Original]** The aqueous gel medium of claim 8, wherein said non-crosslinked hydrophilic polymer is dextran.
- Claim 10.      **[Original]** The aqueous gel medium of claim 9, wherein said dextran has a molecular weight of 2,000 kilodaltons and possesses a non-cross-linked structure composed of approximately 95% alpha-D-(1-6) linkages.
- Claim 11.      **[Original]** The aqueous gel medium of claim 1, wherein said organic additive is an alcohol.
- Claim 12.      **[Original]** The aqueous gel medium of claim 11, wherein said alcohol is present at a concentration of from about 0.1% to about 30% (V/V).

- Claim 13.     **[Original]** The aqueous gel medium of claim 12, wherein said alcohol is selected from the group consisting of: methanol, ethanol, ethylene glycol and glycerol.
- Claim 14.     **[Original]** The aqueous gel medium of claim 13, wherein said alcohol is glycerol.
- Claim 15.     **[Original]** The aqueous gel medium of claim 14, wherein said glycerol is present at a concentration of from about 0.1% to about 30% (V/V).
- Claim 16.     **[Original]** The aqueous gel medium of claim 1, wherein said Tris-borate buffer is present at a concentration of from about 0.1M to about 1.0M.
- Claim 17.     **[Original]** The aqueous gel medium of claim 1, wherein said aqueous gel medium has a pH of  $8.1 \pm 0.1$ .
- Claim 18.     **[Original]** The aqueous gel medium of claim 1, wherein said analytes include analytes selected from the group consisting of: proteins, polypeptides, peptides and nucleic acid molecules.
- Claim 19.     **[Currently Amended]** A capillary electrophoresis system comprising a capillary tube containing an aqueous gel medium, said medium comprising:
- (A)     a non-crosslinked hydrophilic polymer;
  - (B)     tris(hydroxymethyl)aminomethane – borate buffer;
  - (C)     sodium dodecyl sulfate; and
  - (D)     an organic additive;
- wherein:
- said tris(hydroxymethyl)aminomethane – borate buffer has a pH above 8.0 and below 8.3[ $[\cdot]$ ];
- said gel medium additionally contains one or more reagent(s) that function to help keep protein analytes in a reduced form; and**

**wherein** said aqueous gel medium facilitates the electrophoretic separation of said analytes by comprising a molecular sieve.

Claim 20.     **[Canceled]**

Claim 21.     **[Currently Amended]** The capillary electrophoresis system of ~~claim 20~~ **claim 19**, wherein said one or more reagent(s) include a reducing reagent.

Claim 22.     **[Original]** The capillary electrophoresis system of claim 21, wherein said reducing reagent is selected from the group consisting of 2-mercaptoethanol, dithiothreitol (DTT), dithioerythreitol (DTE), and tris(2-carboxyethyl)phosphine.

Claim 23.     **[Original]** The capillary electrophoresis system of claim 22, wherein said reducing reagent is dithiothreitol (DTT).

Claim 24.     **[Currently Amended]** The capillary electrophoresis system of ~~claim 20~~ **claim 19**, wherein said one or more reagent(s) include a metal ion chelator.

Claim 25.     **[Original]** The capillary electrophoresis system of claim 24, wherein said reducing reagent is ethylenediaminetetraacetic acid (EDTA).

Claim 26.     **[Original]** The capillary electrophoresis system of claim 19, wherein said non-crosslinked hydrophilic polymer is selected from the group consisting of: dextran, polyacrylamide, cellulose derivatives and polyethylene oxide.

Claim 27.     **[Original]** The capillary electrophoresis system of claim 26, wherein said non-crosslinked hydrophilic polymer is dextran.

Claim 28.     **[Original]** The capillary electrophoresis system of claim 27, wherein said dextran has a molecular weight of 2,000 kilodaltons and possesses a non-

cross-linked structure composed of approximately 95% alpha-D-(1-6) linkages.

Claim 29. **[Original]** The capillary electrophoresis system of claim 19, wherein said organic additive is an alcohol.

Claim 30. **[Original]** The capillary electrophoresis system of claim 29, wherein said alcohol is present at a concentration of from about 0.1% to about 30% (V/V).

Claim 31. **[Original]** The capillary electrophoresis system of claim 30, wherein said alcohol is selected from the group consisting of: methanol, ethanol, ethylene glycol and glycerol.

Claim 32. **[Original]** The capillary electrophoresis system of claim 31, wherein said alcohol is glycerol.

Claim 33. **[Original]** The capillary electrophoresis system of claim 32, wherein said glycerol is present at a concentration of from about 0.1% to about 30% (V/V).

Claim 34. **[Original]** The capillary electrophoresis system of claim 19, wherein said Tris-borate buffer is present at a concentration of from about 0.1M to about 1.0M.

Claim 35. **[Original]** The capillary electrophoresis system of claim 19, wherein said aqueous gel medium has a pH of  $8.1 \pm 0.1$ .

Claim 36. **[Original]** The capillary electrophoresis system of claim 19, wherein said analytes include analytes selected from the group consisting of: proteins, polypeptides, peptides, polysaccharides, and nucleic acid molecules.